

**In the Claims:**

1. (Currently Amended) A closed-loop system for delivering an insect spray to a treatment area, ~~this~~ the system comprising:

means for producing an aerosol spray of the insecticide at the treatment area during a treatment period of time; ~~and~~

means for controlling the aerosol spray producing means responsive to real-time weather conditions at the treatment area during the treatment period; and

means for controlling the aerosol spray producing means responsive to the real-time size of insecticide particles in the aerosol spray during the treatment period.

Claim 2 cancelled

3. (Currently Amended) The system recited in Claim 2 1, wherein the means for controlling the aerosol producing means responsive to the real-time size of insecticide particles in the aerosol spray comprises:

a particle detector positioned to measure the size of insecticide particles in the spray; and

means for receiving an output from the particle detector and providing an input representative thereof.

4. (Original) The system recited in Claim 3, wherein the means for controlling the aerosol spray producing means comprises means for comparing a desired particle size to the detected particle size.

5. (Original) The system recited in Claim 1, wherein the weather conditions comprise one or more of wind speed, wind direction, temperature and humidity.

6. (Original) The system recited in Claim 5, further comprising:  
a prime mover for moving the spray system through the treatment area during the treatment period;  
means mounted on the prime mover for sensing the weather conditions and providing an electronic output representative thereof; and  
an electronic controller for receiving the electronic output control signals to the means for controlling the aerosol producing spray means.

7. (Original) The system recited in Claim 1, further comprising:  
a prime mover for moving the spray system through the treatment area during the treatment period;  
means for controlling the aerosol spray producing means responsive to the real-time speed of the prime mover while moving through the treatment area during the treatment period.

8. (Currently Amended) A closed-loop method for delivering an insect spray to a treatment area, the method comprising the steps of:  
producing an aerosol spray of the insecticide at the treatment area during a treatment period of time; ~~and~~  
controlling the output of the aerosol spray responsive to real-time weather conditions at the treatment area during the treatment period; and  
controlling the aerosol spray output responsive to the real-time size of insecticide particles in the aerosol spray during the treatment period.

Claim 9 cancelled.

10. (New) A closed-loop system for delivering an insect spray to a treatment area, the system comprising:

an aerosol spray producer of insecticide responsive to real-time weather conditions at a treatment area during a treatment period; and

a controller for controlling the aerosol spray producer responsive to a real-time size of insecticide particles in the aerosol spray during the treatment period.

11. (New) The system recited in Claim 10, wherein the controller comprises a particle detector positioned to measure the size of insecticide particles in the spray.

12. (New) The system recited in Claim 11, wherein the controller comprises means for comparing a desired particle size to the detected particle size.

13. (New) The system recited in Claim 10, wherein the weather conditions comprise one or more of wind speed, wind direction, temperature and humidity.

14. (New) The system recited in Claim 13, further comprising a prime mover for moving the spray system through the treatment area during the treatment period.

15. (New) The system recited in Claim 10, further comprising a prime mover for moving the spray system through the treatment area during the treatment period.